

WHAT IS CLAIMED IS:

1. A composition comprising a substantially pure  
exo  $\beta$ 1-4 Galactosidase obtainable from *Bacteroides*  
*fragilis*.

5 2. A composition according to claim 1, wherein  
the galactosidase is substantially free of  
contaminating proteases.

3. A composition according to claim 1, wherein  
the galactosidase is isolated by:

- 10 (i) obtaining a preparation from *Bacteroides*  
*fragilis*;  
(ii) incubating the preparation with a first  
set of labelled oligosaccharide substrates;  
(iii) determining the presence of galactosidase  
15 activity; and  
(iv) isolating and substantially purifying the  
galactosidase.

20 4. A composition comprising a recombinant  
galactosidase from *Bacteroides fragilis* wherein the  
galactosidase is cloned by:

- (a) isolating DNA from a organism which produces  
the galactosidase;  
(b) forming a gene library from the DNA of step  
(a) in a recombinant host organism; and  
25 (c) identifying recombinant clones of the second  
organism having galactosidase activity.

5. A composition according to claim 4, wherein  
step (c) further comprises the step of utilizing one

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